BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

	Estimate Cost Rs.	2500000.00

Name of Work: Detailed Estimate for the work of Drilling of Borewell and providing water facilities in ward No- 01

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Geophysical investigation of site for sinking borewell for supplying drinking water to the habitation either through the hand pump, MWS or P.W.S.S. by vertical electrical sounding by adopting venner or schlumbergers's method, including reconnaissance survey of geological formation. Geological investigation of existing ground water in vicinity, its quality, quantity & acceptability of the users indicating the location of site, recommended depth of casing pipe required to seal the top unconsolidated formation including an extra depth of 1.0 mtr in consolidated formation for proper seating of casing pipe, depth of drilling required to cover full depth of aquifer proposed to be tapped, probable yield and other information required including transportation of instrument and accessories to work site, engaging technical personal and labour required etc (P.NO-47, I.NO-9.4, PRED 12-13 SR)	Nos							
			2				2	1882.00	3764.00
	Basic Rate	1882.00							
	Total	1882.00							
2	Sinking of borewell of 165 mm dia clear using super fast hydraulic rig of capacity 250 PSIG & above 900 CMF & above in all strata including over budern upto 20 m, fixing of casing pipes, collars & cap with necessary cutting, threading & welding including transportation of rig and supporting vehicle, crew charges & cost of consumables etc., complete including yield testing at the final depth with minimum working of compressor for one hour(excluding cost of casing pipes, collars, cap etc.,) (P.NO-47, I.NO-9.1, PRED 12-13 SR)	Rmt							
	0.00 to 50.00 Mtr.		2	50.00			100.00	315.18	31518.00
	50.00 to 100.00 Mtr.		2	50.00			100.00	412.00	41200.00
	100.00 to 150.00 Mtr.		2	50.00			100.00	458.35	45835.00
	150.00 to 200.00 Mtr.		2	50.00			100.00	484.10	48410.00
	200.00 to 250.00 Mtr.		2	50.00			100.00	560.32	56032.00
	250.00 to 300.00 Mtr.		2	50.00			100.00	600.49	60049.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
3	Supplying of ISI Mark 175 mm nominal bore medium black ERW casing pipe of 5mm thick black electric resistance continous welded midle steel tube material confirming to IS 1387/1993 and manufactured from hot rolled steel skelp/stripes in random length of 4 to 7 mtr both ends threaded confirming to IS 554/1985 one end(including of all taxes) (P.NO-III, I.NO-84, PRED 12-13 SR)	Rmt							
			2	60.00			120.00	1364.75	163770.00
	Basic Rate	1325.00							
	3% area weightage	39.75							
	Total	**1364.75**							
4	Providing and fixing 250mm dia PVC 6 kg/sqcm pressure pipe including jointing and labur charges for laying pipes and as per specification and directions. (BWSSB SR 13-14, P.No.45 I.no.1 of sl.no.11.)	Each							
			2	15.00			30.00	1133.00	33990.00
	Basic Rate	1100.00							
	3% area weightage	33.00							
	Total	**1133.00**							
5	175 mm dia M.S. Casing cap (P.NO-III, I.NO-85, PRED 12-13 SR)	Each							
			2				2.00	100.00	200.00
	Basic Rate	100.00							
6	M.S. Casing pipe collars 175mm dia (P.NO-III, I.NO-86, PRED 12-13 SR)	Each							
			2	15.00			30.00	150.00	4500.00
	Basic Rate	150.00							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
7	Supply & delivery at site brand new texmo/innoval/lubi/sabar /Atalanta/calamal/ waterman/Radha make suitable HP deep well submercible pumpset suitable for vertical installation in 150 dia borewells compressing of single stage or multistage CF pump close coupled by means of stainless steel coupling to suitable HP suitable speed totally enclosed and filled with pure drinking water squirrel cagesubmercible induction motor suitable for operation of 3Ph. 50Hz.380/440 volts AC supply fitted with required accessories such as suction, casing, suction strainers, sand guard. Non return valve etc. Complete the pump and motor shall from an integral unit with all the required fittings 15.000 HP 30 stage (P.NO-XXXXIII, I.NO-33, PWD SR 13-14) kirloscar pumps	set							
			2				2.00	70600.00	141200.00
	Basic Rate	70600.00							
8	Providing, GI pipes confirming to IS specification of approved make with fittings such as collars bends elbows tees nipples plugs with cuts threads using white lead & threads for joints wherever necessary as per direction including all lead & lift etc., complete 'A' grade(excluding cost of fittings)b50mm dia GI pipe (SR 13-14 PWD Page No XVII code No 509, 0154)	Rmtr							
			2	270.00			540.00		
							540.00	330.63	178540.20
	Basic Rate	321.00							
	3% area weightage	9.63							
	Total	330.63							
9	Providing & fixing socket GI (heavy duty collar) (Pwd SR pg xxxviii)	No							
			2	55.00			110.00	84.80	9328.00
	Basic Rate	84.80							
10	Supplying and drawing 3 core PVC Sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS: 8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 volts 4 sqmm of 56 strands 0.3mm dia (P.NO-535, I.NO-30 (c), BWSSB 12-13 SR)	Mtr							
			2	600.00			1200.00	164.29	197142.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	159.50							
	3% area weightage	4.79							
	Total	**164.29**							
11	Supplying & delivery at site brand new / Essen / Lotus sunsines/Adarsh/ Gk controls best indigenous make combine energy meter-cum-control panel board unit of size 1200 x 600 x 300 mm minimum mechanically strong and vermin and water proof the unit shall have two detachable doors suitable for operation on 3ph, 50Hz, 380/440 volts, AC supply with spring loaded latch locking with a key nbs should be provided inside the door , canopy apron and louvers ventilators shall be provided the combine energy mtr cum control panel board unit suitable for operation on 3ph, 50Hz, 380/440 AC supply shall be consisted etc. completed T panel board shall be fabricated on single unit in the above components panel board for suitable pumpset above components panel board for suitable pumpset above 6.50 HP to 15.00 HP with star delta starter (MR)	no							
			2				2.00	10000.00	20000.00
	Existing borewell		1				1.00	10000.00	10000.00
12	Fabricating supplying and mounting MS box of 16 SWG suitable for floor / wall mounting, fully weather proof with provision for better hear description, (providing with hinged front cover, equipped with tamper proof locking arrangements, with suitable size clamps with necessary cable entry pipe with gland and box should be finished 2 coats of red oxide primes paint and finally finished with approved colour enamelled metal paint etc,. complete box of 21600 sq cm (P.NO-530, I.NO-39 b, BWSSB SR 13-14)	Sqm Cm							
			2	1100.00	20.00		44000.00		
	Existing borewell		4	1100.00	20.00		88000.00		
	Basic Rate	0.33					**132000.00**	0.34	44866.80
	3% area weightage	0.01							
	Total	**0.34**							
13	Providing & Fixing of clamps set and borewell cap to the pump .	No's							
			2				2.00	450.00	900.00
14	Supplying & delivery of brand new best make non return valve of size 50mm as per IS: 778/84 with latest amendments with ISI mark (50mm Gate wheel Valve.) (PWD SR 13-14, P.NO.XXIV, Sl.no, 673)	No's							
			2				2.00	1600.00	3200.00
	Existing borewell		5				5.00	1600.00	8000.00

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	1600.00							
15	Supplying and delivery of brand new best make Gate Valve of size 50mm as per IS: 778/84 with latest amendments with ISI mark . 50mm Gate Valve for distributer pipeline. 50mm dia (PWD SR 13-14, P.NO.XXIV, Sl.no. 659)	No's							
			2				2.00	1145.00	2290.00
			5				5.00	1145.00	5725.00
	Basic Rate	1145.00							
16	KSRB 13.6.3.6 Providing and fixing in position brass gate valve with CI wheel of approved quality (Screwed end) 50mm nominal bore including cost of all materials labour and HOM of equipments with all lead complete as per specifications specification No KBS 13.2.6/13.3 (page No 97 item no 13.37)	No's							
			2				2.00	1612.44	3224.88
			5				5.00	1612.44	8062.20
	Basic Rate	1612.44							
17	Providing and fixing of 50mm GI bend to motor (PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2				2.00	219.00	438.00
			4				4.00	219.00	876.00
	Basic Rate	219.00							
18	Providing and fixing of 50mm GI Nipple to motor (PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2				2.00	104.30	208.60
			30				30.00	104.30	3129.00
	Basic Rate	104.30							
19	Providing and fixing of 50mm GI union to the motor ((PWD SR 13-14, P.NO.XXXVIII GI FITTINGS TABLE)	No's							
			2				2.00	223.70	447.40
			4				4.00	223.70	894.80
	Basic Rate	223.70							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
20	Labour charges for erection of new /repaired submersible pumpset along with GI pipes (32/50mm) cable (new submersible pumpset if required will be supplied by the department free of cost and released pump set should be handed over to department) including transportation (each length = 6.00m) (P.No - 564, I.No - 3, BWSSB SR 13-14)	Per length							
			2	55.00			110.00	90.64	9970.40
	Basic Rate	88.00	Nos						
	3% area weightage	2.64	Nos						
	Total	**90.64**	**Nos**						
21	Erection of combined panel board meter board with all necessary materials and labour including providing CC 1:3:6 foundation bed etc. Complete for basement out door type (MR)	No's							
			2				2.00	475.00	950.00
22	Supplying and fixing miniature circuit breakers/isolators on existing MCB distribution boards using necessary fixing materials and wiring complete as required, 5 to 30 amps triple pole with all leadn and lift loading unloading and labour charges etc complete as per specifications Group A (P No 6.15.9/P No 54 Ele Sr 2014-15)	No's							
			2				2.00	1125.79	2251.58
	Basic Rate	1093.00							
	3% area weightage	32.79							
	Total	**1125.79**							
23	Supplying and laying of L.T.U.G Cable having aluminiumconductor PVC insulated shethed galvanised steel wire/ steel tape armoured cable with PVC outer sheathing 1.1 KV class 4 core 16 sqmm cable (confirming to IS 1554) (P.NO - 553, I.NO - 10 (d), BWSSB SR 13-14)	Mtr							
			2	40.00			80.00	169.95	13596.00
	Basic Rate	165.00							
	3% area weightage	4.95							
	Total	**169.95**							
24	Digging of trenches of 0.6mm x 0.50 Mtrs wide refilling the trench to the required ground level and consolidating etc., Complete as per Civil SR KSRB 1.2 P-7 P No 68/ I No 7.93 KPWD Electrical Sr 2014-15	Mtr							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			2	40.00			80.00	109.18	8734.40
	Basic Rate	106.00							
	3% area weightage	3.18							
	Total	109.18							
25	Supplying and fixing of class A (meadium duty) GI pipe of wall thickness not less than 3.25mm on pole / wall/ drain crossing with necessary clamping arrangements for UG cable of 1.1 KV class P No 69/ I No 15-A KPWD Electrical SR 2014-15	Mtr							
			2	3.00			6.00	355.35	2132.10
	Basic Rate	345.00							
	3% area weightage	10.35							
	Total	355.35							
26	Supplying and fixing wiring earth electrode for grounding conduits, IC cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit,/ the pit should be filled with equal proportion of salt and charocal 150 mm alround the pipe to complete depth the connections from the pipe to the conduit etc. is to be established though GI wire of size as per ISI specification 7 3.3 of ISI 732 using 12mm dia boalts, nuts washers and checknuts etc. the pipe shall have 16 through holes of 122mm dia PWD Electrical Sr 1999-2000 P 62 I No 7 KPWD Electrical SR 2014-15	No's							
			2				2.00	2808.81	5617.62
	Basic Rate	2727.00							
	3% area weightage	81.81							
	Total	2808.81							
27	Supply and fixing LT cast iron pot heads suitable for 1.1 KV class 16 sqmmUG cable filled with necessary bitumen/ insulating compound complete with terminals, clamps, bolts nuts and washers etc,P No 69, I No 7.132 KPWD Electrical SR 2014-15	No's							
			2				2.00	288.40	576.80
	Basic Rate	280.00							
	3% area weightage	8.40							
	Total	288.40							
28	Supplying and fixing one of the fuse cut outs having porcelain base, appproved quality on the existing wooden block and wiring complete 16amps	No's							

	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
			2				2.00	288.40	576.80
	Basic Rate	280.00							
	3% area weightage	8.40							
	Total	288.40							
29	Supplying shunt trip capacitors confirming to IS 2834 3 phase 400/440 volts grade for power factor improvement of rotating machinery capacitor in KVAR rating Nos 2 KVAR Capacity with all lead and lift loading unloading and labour charges etc complete as per specification (P No 54 /S No 6.13 KPWD Sr 2013-14)	No's							
			2				2.00	1350.00	2700.00
30	Providing and fixing Gun Material whel valve confirming to IS specification of approved make as per direction including all lead and lift etc complete 50mm dia (P No 94 , I No 13.79.6 PWD SR 2015-16)	No's							
			2				2.00	1617.56	3235.12
			2				2.00	1617.56	3235.12
	Basic Rate	1526.00							
	6% area weightage	91.56							
	Total	1617.56							
31	Supplying and fixing 20"x20"x2.5" polished wood board made of not less than 15mm thick plank on both sides with planks made out on not more than 2 pieces and fixing the same to wall using tapered inverted wooden plugs screws etc., P No 51/I No 6.66 KPWD Electrical Sr 2014-15)	No's							
			2				2.00	311.58	623.15
	Basic Rate	302.50							
	3% area weightage	9.08							
	Total	311.58							
32	KSRB 2-2.2:Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in hard soil not exceeding 1.5 m in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m after breaking of clods complete as per specifications No KBS 2.1(b) 2.3.5 No 5 Item No 2.4/PWD Sr 2015-16	Cum							
			1	2500.00	0.60	0.90	1350.00		
							1350.00	283.02	382077.00

S No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Basic Rate	267.00							
	6% area weightage	16.02							
	Total	283.02							
	Providing and instalation at site of works P.V.C.Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., **Page No.12 item No.3.4.2 b PRED SR 2010-11.**	Rmtr							
	75 mm dia 6 KSC PVC pipe		1	500.00			500.00	157.00	**78500.00**
	63mm dia 6KSC		1	500.00			**500.00**	112.00	**56000.00**
34	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes Confirming to IS 15778 having thermal stability for hot and cold water supply including all CPVC plain and brass threated fittings, this includes jointing of pipes and fittings with one step solvent cement trenching, refilling and testing of joints complete (external work) 40mm nominal OD pipes (page No 104 item no 13.87.5) for pipe line	Rmtr							
			1	1500.00			1500.00	291.60	**437400.00**
35	Providing and installation at site of work 20mm GI pipes including cost of pipes and specials and labour incluidng lowering into trenches, laying ture to line, complete as per direction of Engineer in charge for public taps for motors/pipeline (P.No 90, I No 13.11 PWD SR 15-16)	Mtr							
			2	58.00			116.00	207.87	24112.46
	Basic Rate	196.10							
	6% area weightage	11.77							
	Total	207.87							
36	KSRB 2-4: Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50m and lift upto 1.5m including cost of all labour complete as per specifications (P.NO - 6, I NO - 2.11, PWD SR 15-16)	cum							
							1350.00	76.32	103032.00
	Basic Rate	72.00							
	6% area weightage	4.32							

Sl No	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
	Total	76.32							
37	50 mm dia GI Union	Nos	15				15.00	223.70	3355.50
38	50mm dia GI Nipple	Nos	15				15.00	173.00	2595.00
39	50mm dia GI NRV	Nos	15				15.00	690.00	10350.00
40	50mm dia GI Elbow	Nos	15				15.00	190.00	2850.00
							Sub total		2282212.00
41	KRIDL Service Charges 8%								182576.96
42	Bescom Deposite Charges						2.00	15000.00	30000.00
43	Miscelleaneous								5211.00
								TOTAL	2500000.00

(Rupees twenty five Lakhs Only)

CERTIFICATE

1. The work spot has been inspected and the work is found necessary.
2. The Estimate is prepared as per the PRED SR 2012-13 and PW,P & IWTD SR 2013-14 and BWSSB Electrical SR 2015-16
3. The provisions were made in this estimate are necessary and adequate.
4. This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Yelahanka Sub Division
Bangalore-64

Executive Engineer
Yelahanka Division
Bangalore-64

Technical Sanction
Accorded For "25.00" Lakh Rs
Head of A/C....P0190.....
CER NO :.....46..... Dt:..17.09.16

TA CE (YNK)

Administrative Approval
Accorded For "25.00" Lakh Rs
Head of A/C....P0190.....
CER NO :.....39..... Dt:..17.09.16

TA CE (YNK)